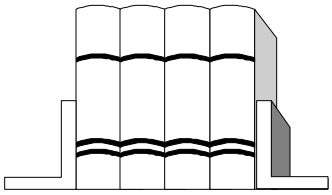
Suggested Reading



These suggested readings—books, periodicals, and other materials—provide further information on the topics discussed in the Haz-Ed materials. Each reading is cross-referenced to the most appropriate Haz-Ed warm-ups, activities, and grade levels. The abstract provides a thumbnail sketch of the resource. A limited number of Spanish-language documents are included.

The documents listed are available from local public, school, or university libraries or, where noted, available free of charge from the referenced sources. EPA also offers other documents on selected Superfund and RCRA topics for purchase. For more information on available documents, please call the RCRA/UST, Superfund, and EPCRA Hotline at (800) 424-9346, between 9:00 AM and 6:00 PM (EST). Free documents available through the Hotline will take three to five weeks to arrive.

Each entry in this list is presented in the following format.

Reference, Abstract	Suggested Grade Level / Related Warm-Ups / Related Activities	## / Ⓦ / Ⓐ

Hazardous Substances: A Reference; Berger, Melvin; Hillside, NJ: Enslow Publishers (1986); 128 pgs.

7-12
Ⓦ 2,3
Ⓐ 1-3 5-7

A plain-language dictionary providing a general understanding of hazardous substances, with entries on field terms, federal laws and agencies, hazardous substances, and selected chemical accidents. The entry for each chemical describes its composition and nature, how it is used and produced, where it is found, and health effects information. Covers specific chemicals and elements (e.g., toluene, mercury) as well as broader categories (e.g., heavy metals).

"Superfund Reauthorization Opens Door to Change;" Clay, Don; Nation's Cities Weekly; 15: February 24, 1992; p. 5.

9-12
Ⓦ 1,5
Ⓐ 9, 12

This article from Don Clay, the former U.S. EPA Assistant Administrator for the Office of Solid Waste and Emergency Response, summarizes the accomplishments, successes, and shortcomings of the Superfund program in light of pending program reauthorization.

Reciclemos en Casa: Guía Práctica para Reciclar en el Hogar (Recycling at Home: A Practical Guide); Clean Pearland.

7-12
Ⓦ 5
Ⓐ 1,3,11, 13

Provides information on recycling household wastes in Spanish. Available from Clean Pearland, (214) 485-2411, extension 227.

Reference, Abstract	Suggested Grade Level	##
	Related Warm-Ups	Ⓦ
	Related Activities	Ⓐ

Fighting Toxics: A Manual for Protecting Your Family, Community, and Workplace; Cohen, Gary and John O'Connor, ed.; Washington, D.C.: Island Press (1990); 346 pgs.

10-12
Ⓦ 2,4,5
Ⓐ 1,4,5,7 11-13

Although activist in tone, this book contains two chapters providing useful general information. Chapter four describes how to obtain information on hazardous chemicals used and hazardous wastes generated in a community, highlighting EPA's Toxics Release Inventory (TRI) and the Freedom of Information Act (FOIA) process. Chapter seven addresses federal laws designed to prevent or limit pollution of the environment: EPCRA, Superfund, and RCRA.

"Is Your School a Dumping Ground? Hidden Hazards You Can Identify and Eliminate;" Cronin-Jones, Linda; The Science Teacher; 59: October 1992; p. 26-31.

7-12
Ⓦ 2,4
Ⓐ 1,5,7 10,11

This article describes an experiment science teachers can use to illustrate how common hazardous wastes are. Student teams discover and identify where hazardous substances (e.g., cleaners and solvents) are stored and discuss safe disposal options and less hazardous product alternatives. Available from the National Science Teachers Association, (703) 243-7100.

Garbage and Recycling; Gay, Kathlyn; Hillside, NJ: Enslow Publishers (1991); 128 pgs.

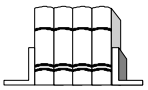
7-10
Ⓦ 2,5
Ⓐ 1,10, 11,13

Provides information on garbage generation, highlighting the problems created by the waste and promoting recycling as a partial solution to the problem. Extensive discussion of recycling paper, scrap metal, plastics, tires, and other materials. Chapter seven examines the management of hazardous waste, discussing RCRA, TRI, and Superfund. Pages 75-77 concentrate on how household hazardous wastes contribute to the problem and discuss solutions.

Water Pollution; Gay, Kathlyn; New York: Franklin Watts (1990); 144 pgs.

9-10
Ⓦ 6
Ⓐ 1,2,3 5,6,9

Discusses threats to water resources from several pollution sources. Chapter two discusses in detail threats to groundwater from industrial, municipal, urban, and agricultural sources as well as leaking landfills and hazardous waste dump sites. Pages 20-21 discuss how pollutants from various sources get into the groundwater and what happens to them when they get there. Students with a basic understanding of groundwater will find this discussion useful.



Reference, Abstract	Suggested Grade Level	##
	Related Warm-Ups	Ⓦ
	Related Activities	Ⓐ

"Neighborhood Prepares to Move for Cleanup of Toxic Black Goo;" Haldane, David; Los Angeles Times; June 28, 1994; p. A3.

7-12
Ⓦ 1,4,5
Ⓐ 1-2,4-7

Provides a good case study of how a Superfund site is created, demonstrating how contaminated sites can develop over many years.

"Hazardous Wastes at Home: Handle With Care;" Consumer Reports; 59: February 1994; p. 101.

7-12
Ⓦ 2,4
Ⓐ 1,3,5 7,11

Useful article detailing the types of hazardous wastes commonly found in the home, how they should be managed, and less toxic alternatives to common household products (e.g., cleaners, solvents, polishes). Part of a larger section on recycling.

Our Endangered Planet: Groundwater; Hoff, Mary; Minneapolis, MN: Lerner Publications (1991); 64 pgs.

7-9
Ⓦ 6
Ⓐ 2,3,5,6

Discusses in simple terms the basics of groundwater: where it is found, how it fits into the water cycle, how it is used, and how it is polluted. A glossary provides basic groundwater terms. Includes examples of young people involved in groundwater protection.

"Using the Allium Test to Detect Environmental Pollutants;" Kendler, Barry and Helen Koritz; The American Biology Teacher; 52: September 1990; p. 372.

7-12
Ⓐ 6

Describes a science experiment students can conduct to learn about the detection of pollutants in organisms. Available from the National Association of Biology Teachers, (703) 471-1134.

Managing Toxic Wastes; Kronenwetter, Michael; Englewood Cliffs, NJ: Julian Messner (1989); 118 pgs.

7-12
Ⓦ 1,2,5
Ⓐ 1-6, 9-12

An excellent, broad-based introduction to the management of hazardous wastes, including chemical and elemental hazards, horror stories of hazardous waste disasters, causes of the problem, and what steps are being taken to solve the problem and prevent future disasters. Chapter two covers the story of the Love Canal, NY, hazardous waste dump, including the origins of the problem, how the community was affected, and what the government did to correct the problem. Chapter five examines the parties – public, private, and individual – who contribute to the creation of hazardous waste sites. Chapter seven explains regulatory efforts undertaken by the federal government to deal with the management of hazardous wastes, including RCRA and EPCRA. Chapter eight is devoted entirely to the Superfund program; its genesis, development, and progress.

Reference, Abstract	Suggested Grade Level	##
	Related Warm-Ups	Ⓦ
	Related Activities	Ⓐ

The Future for the Environment; Lambert, Mark; New York: Bookwright Press (1986); 48 pgs.

7-9
Ⓐ 5,6,13

Provides a basic perspective on how pollution issues may be dealt with in the students' future, presenting a forward-looking discussion of environmental problems, causes, and possible solutions. Does not directly deal with hazardous waste disposal or chemical accidents.

Technological Risk; Lewis, H.W.; New York: W.W. Norton & Co (1990); 353 pgs.

9-12
Ⓦ 4
Ⓐ 7

Discusses the nature of risk and risk assessment, examples of risk, and, briefly, general rules of statistics and probability. Provides information to allow students to distinguish between perceived and actual risks posed by different activities, substances, and occurrences. Includes clear, basic technical discussion of the science of risk assessment and how governments use the information to protect public health and welfare. Includes two chapters on the risks posed by hazardous chemicals.

Design For a Livable Planet: How You Can Clean Up the Environment; Naar, Jon; New York: Harper & Row (1990); 338 pgs.

11-12
Ⓦ 1
Ⓐ 1,3,5, 11,12

A guide to citizen action to help prevent environmental pollution. Chapter two addresses hazards posed by mismanagement of hazardous waste, including chemical accidents, and a description and critical assessment of the Superfund program. Examines U.S. environmental laws, including RCRA, Superfund, and EPCRA. Chapters include a list of actions citizens can take.

"A Superfund Success: Toxic Texas Lagoon 'Bio'-Cleaned;" Pendelton, Scott; The Christian Science Monitor; November 4, 1994; p. 7.

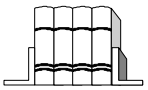
7-12
Ⓦ 1,5
Ⓐ 2,8,9

Provides good contrast to more critical articles on Superfund. It discusses a Superfund site cleaned up by a cooperative venture of responsible parties, and includes discussion of innovative technologies.

Living in a Risky World; Pringle, Laurence; New York: Morrow Junior Books (1989); 105 pgs.

7-9
Ⓦ 4
Ⓐ 7

Discusses the concept of risk in very basic terms, such as the risks entailed in living daily life, with only limited discussion of the science of risk assessment. Chapter three deals with identifying hazards and measuring risks (largely through examples), how scientists assess the nature and probability of a risk, and how that probability is communicated. Includes a potentially disturbing picture of a scientist injecting a rat. Chapter four looks at how the government uses risk assessment to create laws and regulations to protect the public.



Reference, Abstract	Suggested Grade Level ##
	Related Warm-Ups Ⓦ
	Related Activities Ⓐ

Environmental Politics and Policy, Second Edition; Rosenbaum, Walter A.; Washington, D.C.: CQ Press (1991); 336 pgs.

10-12
Ⓦ 1,4,6
Ⓐ 1,3,7, 12

This book examines the formulation of environmental policy. Chapter seven and pages 44-52 discuss the management and regulation of hazardous wastes, including the structure, successes, and failures of Superfund and RCRA. Chapter five critically examines risk assessment, from the scientific bases to regulatory applications. There is brief discussion of groundwater (pp. 41-43, 202-206) which provides useful information on specific sources of groundwater contamination and the various agencies involved in protecting groundwater. Pages 97-108 list the various Federal agencies responsible for environmental protection and discuss how they work.

Boletin Ambiental: Las Alternativas Menos Toxicas (Environmental Bulletin: Less Toxic Alternatives to Household Cleaning Products); Texas Natural Resource Conservation Commission.

7-12
Ⓦ 2
Ⓐ 1,3,11

Describes less hazardous alternatives to standard commercial household cleaning products in Spanish. Available from the Clean Texas 2000 Information Center, (800) 648-3927.

1993 Toxics Release Inventory Public Data Release, Executive Summary; 1995; U.S. EPA; 745-S-95-001.

9-12
Ⓦ 1,4
Ⓐ 1,5-7 11

Summarizes national and state data for 1993. Includes an overview of the TRI program, the quantity and type of chemicals released into the environment, and an assessment, by environmental medium, of which states had the largest releases. Available free from the RCRA/UST, Superfund, and EPCRA Hotline, (800) 424-9346.

1993 Toxics Release Inventory Public Data Release, State Fact Sheets; U.S. EPA; 1995; 745-F-95-002.

9-12
Ⓦ 1,4
Ⓐ 1,5-7 11

Provides 1993 toxic release data by state, including the top five chemicals released into the environment and the top ten releasing facilities for each state. Available free from the RCRA/UST, Superfund, and EPCRA Hotline, (800) 424-9346.

Characterization of Municipal Solid Waste in the United States: 1994 Update; Executive Summary; U.S. EPA; 1994; 530-S-94-042.

7-12
Ⓦ 2
Ⓐ 1,3

Summarizes a study of municipal solid waste (MSW) that includes data from 1960 to 1993. Summary characterizes MSW generation and management to the year 2000. Available free from the RCRA/UST, Superfund, and EPCRA Hotline, (800) 424-9346.

Reference, Abstract	Suggested Grade Level / Related Warm-Ups / Related Activities

Chemical Releases and Chemical Risks; U.S. EPA; 1989; 560-2-89-003.

9-12
Ⓦ 1,4
Ⓐ 1,5-7 11

Explains how the Toxics Release Inventory (TRI) can be used to understand chemical risks faced by a community. Available free from the RCRA/UST, Superfund, and EPCRA Hotline, (800) 424-9346.

Chemicals In Your Community: A Guide to EPCRA; U.S. EPA; 1988; 550-K-93-003.

9-12
Ⓦ 1,4
Ⓐ 1,5-7 11

An introductory guide to the EPCRA program. Available free from the RCRA/UST, Superfund, and EPCRA Hotline, (800) 424-9346.

Consumer's Handbook for Reducing Solid Waste; U.S. EPA; 1992; 530-K-92-003.

7-12
Ⓦ 2
Ⓐ 1,3,11

Discusses amount and types of wastes generated by the average household, both municipal solid waste (garbage) and household hazardous waste. Tips on recycling and safe handling of hazardous wastes are included. Available free from the RCRA/UST, Superfund, and EPCRA Hotline, (800) 424-9346. Also available in Spanish.

Does Your Business Produce Hazardous Wastes? Many Small Businesses Do; U.S. EPA; 1990; 530-SW-90-027.

7-12
Ⓦ 2
Ⓐ 1,3,11

For 18 common small businesses, delineates the types of hazardous substances commonly used in that industry. A useful tool for determining the types of hazardous wastes generated by the businesses in the students' community. Available free from the RCRA/UST, Superfund, and EPCRA Hotline, (800) 424-9346.

Facility Pollution Prevention Guide; U.S. EPA; 1992; EPA/600/R-92/088.

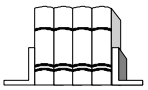
11-12
Ⓦ 2
Ⓐ 1,3,10 11

Explains in detail how manufacturing and other facilities can reduce the amount and toxicity of wastes they produce. Designed for facility managers and pollution prevention officers, this document provides additional insight into steps that facilities can take to reduce pollution. Available free from EPA's Office of Research and Development (ORD), (513) 569-7562.

Hazardous Substances In Our Environment: A Citizen's Guide to Understanding Health Risks and Reducing Exposure; U.S. EPA; 1990; 230-9-90-081.

9-12
Ⓦ 4
Ⓐ 5,7,11

Discusses development and application of risk and exposure assessments and how the government and community organizations can reduce that risk. Available free from the RCRA/UST, Superfund, and EPCRA Hotline, (800) 424-9346.



Reference, Abstract	Suggested Grade Level ##
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	Related Activities Ⓐ

Household Hazardous Waste Management: A Manual for One-Day Community Collection Programs; U.S. EPA; 1993; 530-R-92-026.

7-12
Ⓦ 2
Ⓐ 1,11 13

Helps communities plan for one-day, drop-off household hazardous waste (HHW) collection programs. Provides community leaders with guidance on all aspects of planning, organizing, and publicizing an HHW collection program. Available free from the RCRA/UST, Superfund, and EPCRA Hotline, (800) 424-9346.

Household Hazardous Waste: Steps to Safe Management; U.S. EPA; 1993; 530-F-92-031.

7-12
Ⓦ 2
Ⓐ 1,11 13

Describes household hazardous waste and the dangers of improper disposal. Urges homeowners to reuse, recycle, and properly manage household hazard wastes. Available free from the RCRA/UST, Superfund, and EPCRA Hotline, (800) 424-9346.

1993 Biennial RCRA Hazardous Waste Report; Executive Summary; U.S. EPA; 1995; 530-S-95-039.

7-12
Ⓦ 2
Ⓐ 1,3

Summarizes EPA's report based on 1993 data collected from hazardous waste large quantity generators and treatment, storage, and disposal facilities. Includes information about generation, management, and final disposition of hazardous waste regulated by RCRA. Available free from the RCRA/UST, Superfund, and EPCRA Hotline, (800) 424-9346.

SARA Title III Fact Sheet; U.S. EPA; 1993; 550-F-93-002.

9-12
Ⓦ 1,4
Ⓐ 1,5-7 11

This fact sheet summarizes the Emergency Planning and Community Right-to-Know Act (EPCRA) program. Available free from the RCRA/UST, Superfund, and EPCRA Hotline, (800) 424-9346.

El Programa de Superfund: Guia Ciudadana de Programa de Superfund de la EPA; U.S. EPA; 1994; EPA 540-K-94-002; PB 95-963205.

9-12
Ⓦ 1
Ⓐ 2,4 7-9,12

A Spanish-language version of the pamphlet summarizing the Superfund program and process that is included in the Haz-Ed materials package. The document is available free of charge from NTIS, (703) 487-4650.

Environmental Policy in the 1990s, second edition; Vig, Norman and Michael E. Kraft, ed.; Washington, D.C.: CQ Press (1994); 422 pgs.

11-12
Ⓦ 1,4,6
Ⓐ 3,7-9 12,13

Discusses how public environmental policy has changed since the 1970s, and where it is headed. Examines the relationship between federal and state environmental attitudes, policies, and regulations. Discusses the development of the current Federal/state power relationship, and predicts the likely consequences of transferring

Reference, Abstract

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Related Warm-Ups Ⓦ
Related Activities Ⓐ

regulatory authority to states. Examines different methods of evaluating the successes and failures of major environmental policy initiatives, including a critical assessment of the Superfund program. Provides an excellent and sophisticated discussion of risk-based decisionmaking, including a good explanation of the elements of a risk assessment and how regulators act on those assessments in making laws, policies, and site-specific determinations.

Water: No Longer Taken For Granted; VonBrook, Patricia, et al, ed.; Wylie, TX: Information Press (1989); 92 pgs.

9-12
Ⓦ 6
Ⓐ 1,2,5,6

Provides a broad assessment of water and water pollution, including the nature of water, where it is found, how it is used, and how different types of water pollution affect the environment and humans. Explains the nature and uses of groundwater in an easy-to-understand fashion, discussing groundwater flow, aquifers, and characterization and common sources of groundwater contamination, using tables and maps to illustrate and develop main ideas. Pages 44-47 address groundwater pollution from hazardous waste sources, including Superfund sites.

In Our Backyard: A Guide to Understanding Pollution and its Effects; Wagner, Travis; New York: Van Nostrand Reinhold (1994); 320 pgs.

7-12
Ⓦ 1,2,6
Ⓐ 1,5,6 8,9,12

This exceptional book examines different types, sources, and effects of pollution, using a simple, accessible question and answer format to explain the many aspects of environmental pollution and what activities can be and are undertaken to remedy the problem. Chapter 3 provides an excellent discussion of the nature and activity of groundwater, examining the diverse sources of contamination and explains how contaminated groundwater is cleaned up and the impediments to such remediation, providing many clear and helpful graphics to illustrate key points. Chapter 5 gives extensive treatment to the facets of waste management: identification, storage, treatment, and disposal. The Superfund process is clearly explained on pages 139-142. Chapter 8 lists the sources of household pollution affecting human health both within and outside the home. Appendix I lists health effects for almost 100 different substances, from asbestos to gasoline to toluene.

"Going Around in CERCLA;" Waite, David; American City & County; 108: August 1993; p. 58.

11-12
Ⓦ 1
Ⓐ 1,12

A case study of Superfund liability and cost recovery, controversial issues in the Superfund program. Includes discussion of how household hazardous wastes contribute to potential Superfund sites.